PVS8

- Dual-Band CDMA
- Full Voice Support
- USB 2.0
- GPS
- Extended Temperature Range
- RIL Driver

CDMA
Cinterion® PVS8 Wireless Module
Thinnest CDMA LGA Module in the Market
The new Cinterion PVS8 offers a smart solution for wireless connectivity today and in the future. PVS8 supports CDMA2000 technology standard, it comes in the exact same form factor as the Cinterion PHS8 (HSPA+ only) and the PXS8 (Multi Mode CDMA / HSPA+) module as well allowing room for growth to 4G cellular technology, to support highest flexibility and a future proof design for our customers.

With the latest technology, PVS8 is optimized for high bandwidth and allows EV-DO data rates up to 3.1 Mbps. By enabling a full range of M2M functions and features, the PVS8 offers an ideal communication solution for the challenging requirements of a variety of M2M applications, such as ruggedized mobile computing, security solutions or medical equipment.

The unique type of LGA technology enables optimized heat dissipation that prevents warpage. It gives our customers the freedom to select the most beneficial soldering paste for each individual application.

Like all Cinterion products, the PVS8 comes with full type approval (FTA) and is certified by the largest CDMA carriers.

Future Proof Design
At just 2 mm in height, PVS8 is ideal for integration in the slimmest and most size constraint M2M solutions. With the latest long-life chipset, a footprint equivalent to 3G HSPA+ module PHS8 and prepared for forthcoming LTE modules, PVS8 provides longevity and a reliable path to the future for any high-bandwidth M2M applications.

Full Voice Support
PVS8 includes best-in-class analog audio processing which allows quick & easy audio implementation.

Improved Power Management
PVS8 improved power management features preserve the battery power necessary for remote M2M devices and reduce heat generation. Combined with its intelligent design for superior heat dissipation, PVS8 is the first choice for temperature critical M2M applications.

Gemalto M2M Support includes:
- Personal design-in consulting for hardware and software
- Extensive RF test capabilities
- GCF/PTCRB conform pretests to validate approval readiness
- Regular training workshops

Local engineers, a competent helpdesk, a dedicated team of R&D specialists and an advanced development center are the hallmarks of our leading support offer.
# Cinterion® PVS8 Features

## General Features

- **Triple Band CDMA2000**
  - Bands: BC0/BC1 & BC10 subclass 2+3 (800/1900MHz)
  - 3GPP2: 1 x Advanced, EV-DO Rev. A
  - QLIC, Rx-Diversity, Equalizer
- **Data, Voice and TTY support**
- **Control via standardized and extended AT commands (Hayes, TS 27.007, TS 27.005)**
- **Supply voltage range 3.3 – 4.2 V, highly optimized for minimal power consumption**
- **Dimension: 29 × 33 mm**
- **Operational Temperature Range: -40 °C to +85 °C**
- **RoHS and WEEE compliant**

## Specifications

- **EV-DO Rev.A data rates**
  - FL: max. 3.1 Mbps, RL: max. 1.8 Mbps
  - 1 x Advanced data rates
  - FL: max. 307.2 kbps, RL: max. 307.2 kbps
  - CSD data transmission up to 14.4 kbps, V.110
- **FL: max. 3.1 Mbps, RL: max. 1.8 Mbps**
- **1 x Advanced data rates**
  - FL: max. 307.2 kbps, RL: max. 307.2 kbps
- **CSD data transmission up to 14.4 kbps, V.110**
- **TCP/IP stack access via AT commands**
- **SMS text and PDU mode, Phonebook support**
- **Voice support, optimized for high quality handset, headset and hands-free telephony with dual microphone support for suppression of non-stationary background noise**
- **Firmware update via USB and serial interface**
- **Multiplexer according 3GPP TS 27.010**

## Special Features

- **USB interface supports multiple composite modes and a Linux-/Mac- compliant mode**
- **TCP/IP stack access via AT commands**
- **Firmware update via USB and serial interface**
- **Multiplexer according 3GPP TS 27.010**

## GPS/GLONASS Features

- **Standalone GPS and GLONASS**
- **GNSS dedicated AT commands**
- **A/GPS support: standalone, XTRA®, CP E911**
- **Protocol: NMEA-0183 V2.3**
- **Option for temporary NMEA stream buffering**
- **Tracking Sensitivity: better than -158 dBm**

## Interfaces (SMT-LGA)

- **LGA mounting**
- **2 pads for WAN Diversity-Antennas**
- **1 pad for an active GPS Antenna**
- **Analog audio interface (balanced)**
- **Digital audio interfaces (PCM or I2S)**
- **USB 2.0 HS interface up to 480 Mbps**
- **High speed serial interface up to 920 kbps**
- **Pads for Emergency-Off, Ignition, Network Status Indication, Low Current Indication**

## Drivers

- **NDIS/USB/MUX driver for Microsoft® Windows XP™, Windows Vista™ and Windows 7™**
- **RIL/NDIS/USB/MUX driver for devices based on Microsoft® Windows Embedded Handheld™**
- **USB/MUX driver for Microsoft® Windows Embedded Compact™**
- **RIL driver for devices based on Android OS™**
- **CDC-ACM compliant mode for Linux**

## Approvals

- **FCC, UL, IC, CCF**
- **Verizon Wireless approval (CDG1/CDG2), Sprint**
- **Additional local approvals and network operator certifications**
The information provided in this brochure contains merely general descriptions or characteristics of performance, which in case of actual use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract. All product designations may be trademarks or product names of Gemalto M2M GmbH or supplier companies whose use by third parties for their own purposes could violate the rights of the owners. Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners. ARM9 is a registered trademark of ARM Limited.

Gemalto M2M GmbH
Werinherstraße 81
81541 Munich
Germany